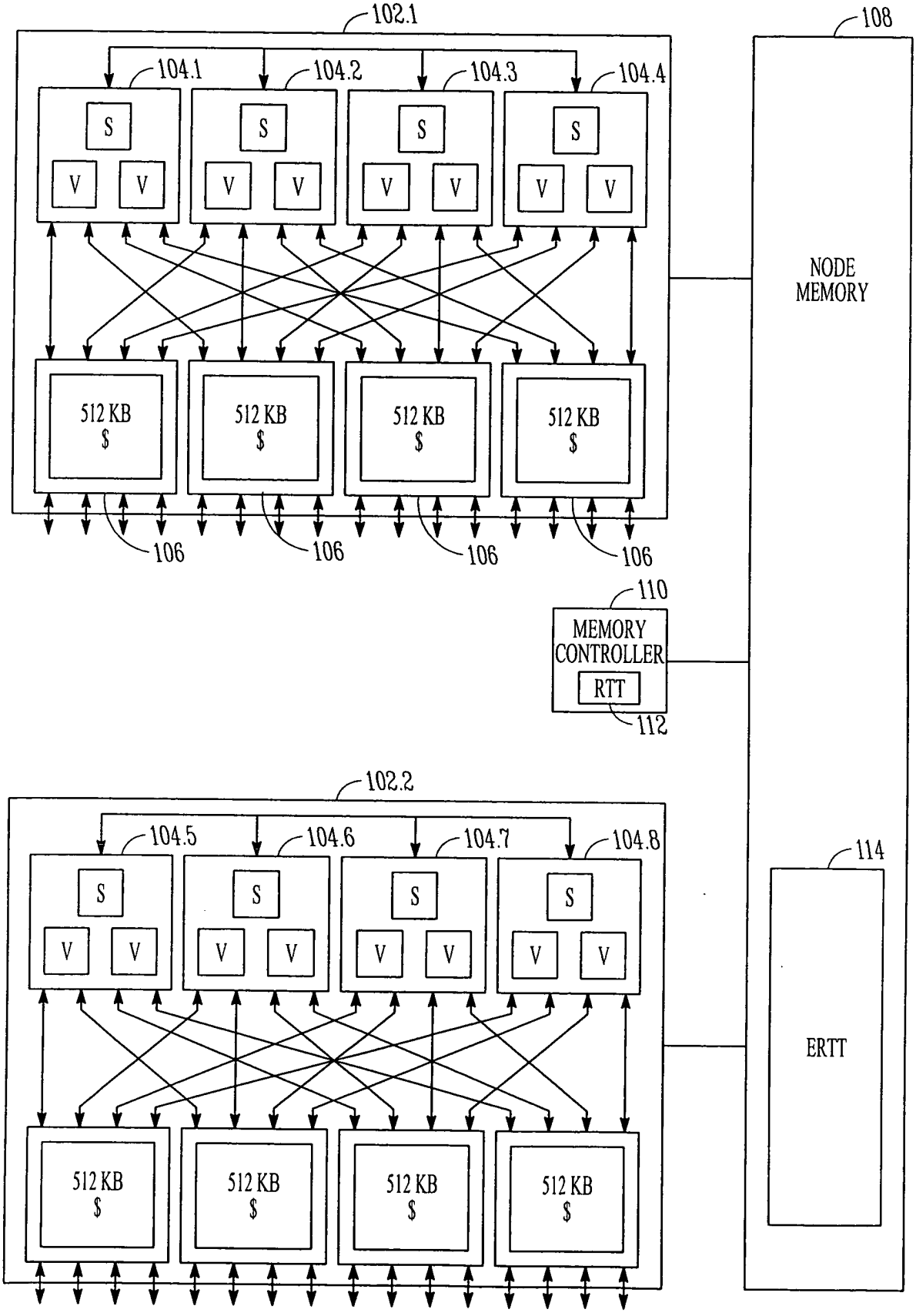
100
102.1
108
104.1
104.2
104.3
104.4
S
V
512 KB
$
106
NODE
MEMORY
110
MEMORY
CONTROLLER
RTT
112
102.2
104.5
104.6
104.7
104.8
114
ERTT

FIG. 1

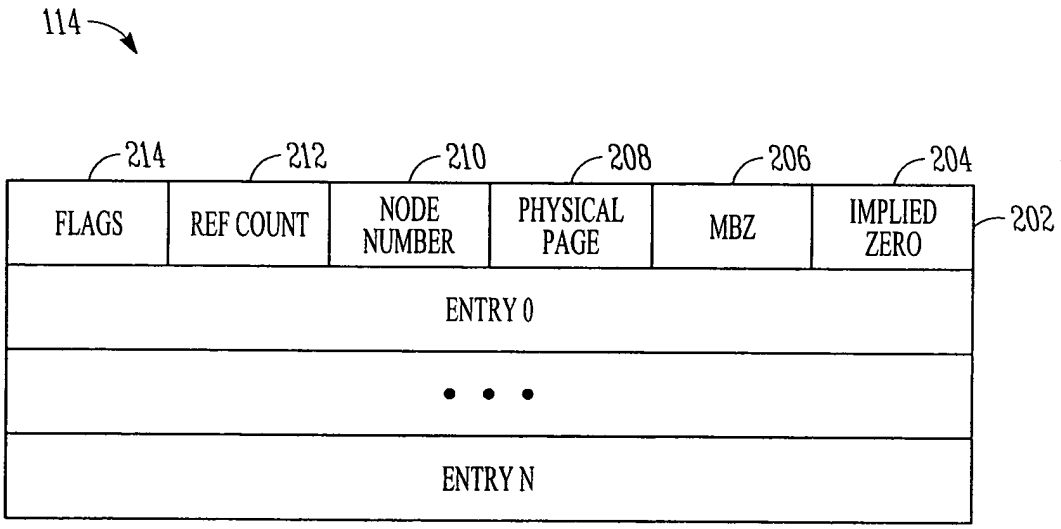
114
214
212
210
208
206
204
FLAGS
REF COUNT
NODE NUMBER
PHYSICAL PAGE
MBZ
IMPLIED ZERO
202
ENTRY 0
• • •
ENTRY N

FIG. 2

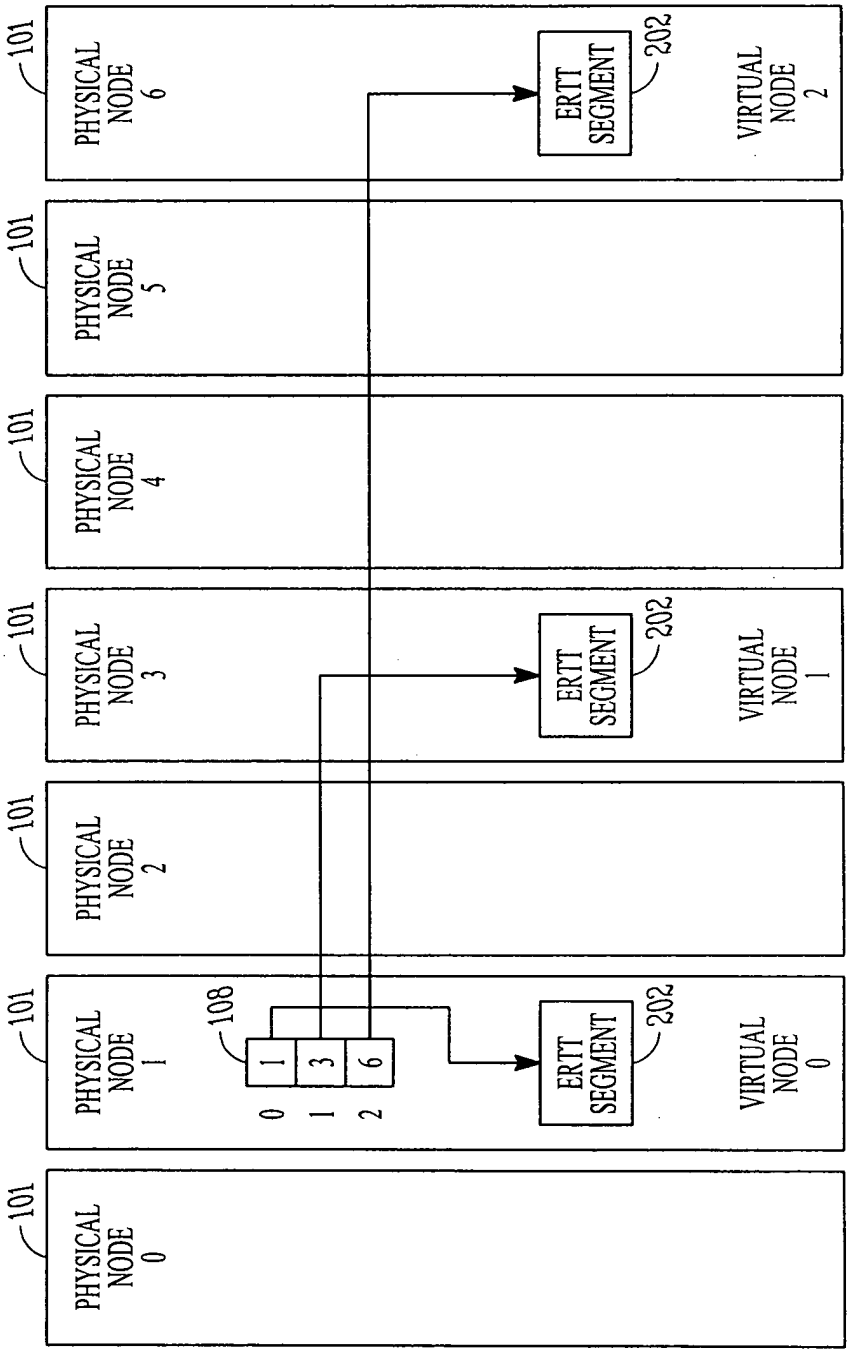
PHYSICAL NODE 6
101
ERTT SEGMENT
202
VIRTUAL NODE 2
PHYSICAL NODE 5
101
PHYSICAL NODE 4
101
PHYSICAL NODE 3
101
ERTT SEGMENT
202
VIRTUAL NODE 1
PHYSICAL NODE 2
101
PHYSICAL NODE 1
101
108
1
3
6
0
1
2
ERTT SEGMENT
202
VIRTUAL NODE 0
PHYSICAL NODE 0
101

FIG. 3

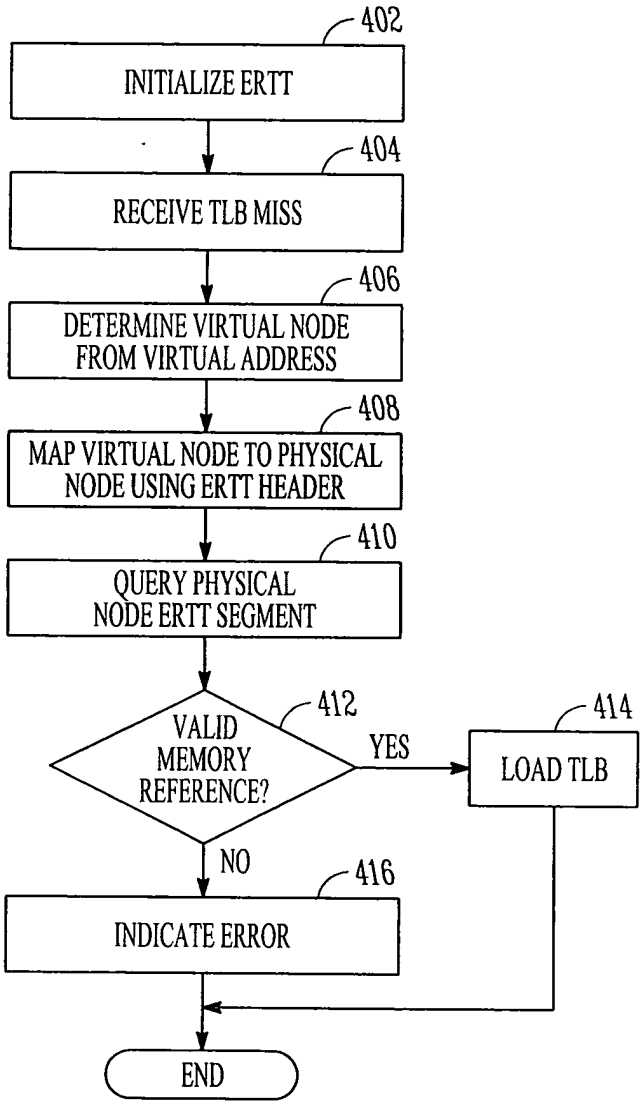
402
INITIALIZE ERTT
404
RECEIVE TLB MISS
406
DETERMINE VIRTUAL NODE FROM VIRTUAL ADDRESS
408
MAP VIRTUAL NODE TO PHYSICAL NODE USING ERTT HEADER
410
QUERY PHYSICAL NODE ERTT SEGMENT
412
VALID MEMORY REFERENCE?
YES
414
LOAD TLB
NO
416
INDICATE ERROR
END

FIG. 4